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## VICTORIAN GOVERNMENT RESPONSE TO THE AVIATION GREEN PAPER – TOWARDS 2050





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## Introduction

Victoria's aviation sector is central to the state's transport network and economy. Melbourne and Avalon International Airports play vital roles in connecting Victoria to other parts of Australia and the world, whilst Victoria's regional airports provide critical infrastructure for connecting communities, supporting medical and emergency response services, and conducting flight training for pilots of both Australian and international airlines.

From working with our airports on the recovery of international air services and supporting emerging aviation technologies, to growing our skilled workforce to meet the future needs of the industry and establishing long term planning protections for our current and potential future airports, the Victorian Government has taken a proactive role in ensuring the future success of our aviation sector.

Melbourne Airport is on track to become the first Australian airport to exceed pre-pandemic levels of international capacity to bring more tourists and international students to the state, reconnecting families and friends, and supporting Victorian exporters.

In 2022, the Victorian Government launched the Advanced Air Mobility (AAM) Industry Vision Statement that outlines the Government's commitment to supporting the development of an AAM, drone and electric aviation industrial base, providing certainty and confidence for industry to enable investments and operations in Victoria.

In September 2023, the Victorian Government released a whole-ofgovernment AAM Action Plan that will create market pathways for operational enablement and articulates a range of proposed actions and associated timings that are critical for capturing investment in research and development, advanced manufacturing, and operations of emerging aviation technologies.

To unlock regulatory, policy, and operational challenges facing commercialisation of AAM, the Victorian Government is supporting a drone trial in the Latrobe City region to replicate future larger AAM aircraft operations and support market development opportunities for aeromedical, emergency services, critical freight, and regional passenger transport. The Skills First Program is supporting the provision of aviation apprenticeships and maintenance training across Victoria. The Workforce Training Innovation Fund (WTIF) is a targeted, Skills First funding stream. WTIF has supported Aviation/Aerospace Australia to develop 20 aviation micro-credential skillsets and deliver a training course to students.

The Regional and Specialist Training Fund (RSTF) is a targeted funding stream that supports training for specific skills in regional areas of Victoria and specialist areas of industry need. RSTF has supported Aviation Australia to deliver training in Sale to students who could earn and learn as apprentices with Jet Aviation.

A new program in Victoria, commencing in 2024, has also been developed by Aviation Australia for students to undertake an Aeroskills VET Delivery to School Students (VDSS) subject in 2024. Students will study the Certificate II in Aircraft Line Maintenance one day per week across the final two years of secondary school study.

Victoria's State Planning Policy supports Melbourne and Avalon airports' ongoing curfew free status. Along with Melbourne and Avalon airports' designated significance as transport gateways, a possible South-East Airport is recognised in *Plan Melbourne 2017-2050*, the Victorian Government's metropolitan planning strategy, which aims to manage growth in the city and its surrounding suburbs to the year 2050. The Victorian Government is developing a new Plan for Victoria, which will build on Plan Melbourne, including the state's housing and land use needs to 2050.

The Victorian Government is positioning the State to be ready to respond to new challenges and opportunities in the aviation sector.

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The Hon. Natalie Hutchins MP Minister for Jobs and Industry Minister for Treaty and First Peoples Minister for Women



Jobs, Skills, Industry and Regions



## **Response Summary**

The Victorian Government welcomes the opportunity to provide a response to the Department of Infrastructure, Transport, Regional Development, Communication, and the Arts' *Aviation Green Paper – Towards 2050*, which will in turn lead to the development of an Aviation White Paper.

This response to the Aviation Green Paper has been coordinated by the Department of Jobs, Skills, Industry and Regions (DJSIR) and provides a consolidated whole of Victorian Government response. Relevant portfolios within the Victorian Government have been consulted for their contribution to the submission. These include DJSIR, the Department of Premier and Cabinet (DPC), the Department of Treasury and Finance (DTF), the Department of Transport and Planning (DTP), the Department of Energy, Environment and Climate Action (DEECA), the Department of Families, Fairness and Housing (DFFH), and the Victorian Skills Authority.

The intent of the Aviation White Paper 2024 is to enable long term investment and the maintenance and improvement of Australia's internationally envied safety record and articulate clear commitments to consumers and communities affected by aviation activity. To address the potential changes in the sector addressed by the paper, and the actions that may be needed to prepare the industry for long-term growth; responses focus on the following areas:

#### Workforce Skills and Training Requirements

The Victorian Government encourages further development of education and training pathways to support the changing needs of the aviation sector. The aviation sector will be greatly impacted by the transition to a net zero economy, with the introduction of new materials, aircraft, and fuel types to lower the emissions associated with air transport. This will drive future workforce needs across both vocational and higher education qualifications, requiring agility and responsiveness to emerging workforce requirements.

#### **Emerging Aviation Technologies**

The Victorian Government welcomes the proactive commitment by the Commonwealth to develop the ecosystem to support emerging aviation technologies, such as Advanced Air Mobility (AAM), drones and electric/hydrogen aviation. Early efforts to create a coordinated enabling ecosystem, regulatory pathways and planning for associated infrastructure will support investment in these emerging industries, which will grow sovereign manufacturing capability and jobs, support efficiencies across a range of critical functions (such as emergency services and regional service delivery) and assist efforts to decarbonise our economy.

The Victorian Government has released an AAM Industry Vision Statement and AAM Action Plan that will assist alignment with Commonwealth responsibilities to support the development of an aligned ecosystem to realise the new economic and social opportunities from this sector that forms part of the broader transition to a net zero economy.

#### **Consumer Protections**

The Victorian Government is open to engaging in future discussions regarding revisions to the Civil Aviation (Carriers' Liability) Act 1959 or the establishment of new mechanisms which will enhance consumer protection arrangements.

The Victorian Government notes current remedies for breaches of the ACL's consumer guarantees in relation to the supply of services (primarily damages) are unlikely to be of direct use for consumers whose travel plans have been disrupted at late notice, especially when in mid-journey when damages or travel insurance are likely to be of limited use. The protections offered in the European Union's Air Passenger Rights Regulation (EU261/2004) are worth consideration in this context.

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These regulations set out a range of protections for consumers whose flights are cancelled or delayed due to reasons within the airline's control, or where passengers are denied boarding.

#### **Disability Access**

The Victorian Government supports the paper's focus on improving access for people with disability and taking additional measures to remove barriers in line with Policy Priority 5 of Australia's Disability Strategy 2021 – 2031. The Disability Royal Commission's final report highlights the importance of consultation, collaboration and co-design with people with disability, which is an important consideration for identifying improvements to aviation accessibility that are outside the scope of the Disability Standards for Accessible Public Transport, and Disability Access Facilitation Plans.

The Victorian Government strongly supports an agreed way of managing responsibility for matters occurring at airports and in flight. The Green Paper articulates well how the lack of operational responsibilities across airlines, airports, and interface areas can lead to and/or exacerbate poor access and inclusion for people with disability. The lack of well-defined divisions of jurisdiction and responsibilities are a key contributor to discriminatory practices and negative and distressing experiences for people with disability.

#### **Regional and Remote Aviation Services**

The Victorian Government recognises the important role that aviation plays in servicing the needs of regional and remote communities across Australia. Victoria welcomes the consideration of an extension of the federal Regional Airports 'funding' Program (RAP) which seeks to improve the safety of aircraft, operators and passengers using regional airports or aerodromes and facilitate improved delivery of essential goods and services such as food supplies, health care and passenger air services. The Victorian Government acknowledges the most recent support provided to aerodromes in Echuca, Bairnsdale, Mildura, Bacchus Marsh, Nhill, Edenhope, Maryborough, and Bendigo.

#### **Air Cargo Facilitation**

Australia's airfreight supply chain plays a critical role in the Australian economy. Victorian air freight exports are highly focused as Australia's largest producer of highvalue, time-sensitive, temperature-controlled goods. The export of these was significantly impacted by disruptions to the air freight supply chain during the COVID period and is yet to recover.

The concentration of air freight into a single jurisdiction is detrimental to all other jurisdictions. The resulting reliance on road and rail freight, with resulting increased emissions, lack of resilience in the event of disruptions, and increased time to market for time-sensitive goods, negatively impacts importers and exports and broader industries and communities.

The 2023 Review of the National Freight and Supply Chain Strategy is currently underway. Alignment of policies and approaches contained within this new report should be harmonised with the Aviation White Paper.

#### Maximising Aviation's Contribution to Achieving Net Zero Carbon Emissions

The Victorian Government encourages early actions to support decarbonisation and the growth in electric aviation, which could be accomplished by supporting General Aviation (GA), flight training, and airports to adopt the current range of small electric aircraft in the market. Efforts should be prioritised to increase adoption and ecosystem readiness to boost decarbonisation efforts and grow commercial market mass to reduce costs.

Funding programs should be focused, and clear objectives identified to solve critical commercial challenges and facilitate priority use cases. Funding programs dedicated to research and development should also encourage industry co-investment to ensure outcomes are aligned with priority commercial outcomes.



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#### **Airport Development Planning Processes and Consultation Mechanisms**

The Victorian Government supports continued work to minimise noise impacts from airports on local communities, including through appropriate planning provisions and obligations on airports and legislative requirements to ensure good outcomes for local communities as a priority. Victoria also looks forward to advances in technology and aircraft operations for a cleaner and greener aviation industry to reduce aircraft noise and other impacts on communities.

Successive State Governments have long planned to ensure Victoria's major airports can operate 24/7 curfew free. Victoria's state planning policy supports both Melbourne and Avalon airports' ongoing curfew free status. While streamlining of development planning processes for airports would be positive, any changes should not dilute, but should seek to improve, outcomes for communities close to airports. The obligation to, as far as possible, reduce operational impacts on surrounding communities remains, in the first instance, with the operators of federally leased airports, the airline industry, and federal regulators.

The Victorian Government supports the reference to preparation of best practice guidance by Commonwealth agencies on consultation and ongoing engagement with affected communities beyond formal Community Aviation Consultation Groups and in addition to any public consultation requirements of state and Commonwealth statutory approvals processes.

The Green/White paper process presents a timely opportunity to revisit how land use planning can better reflect aircraft noise and other safeguarding risks to provide the community with a more enduring sense of certainty about the impacts of airports and aircraft activity on their property. A more sustainable approach to planning for aircraft noise and other safeguarding risks would avoid the need for regular updates to planning controls to reflect updated airport master plans.

Victoria supports improved arrangements for planning and development on airports and developing cooperative arrangements with State and local governments. Requirements for Major Development Plan preparation need to consider consistency with prevailing planning schemes and significant impacts on a broad range of values including community, environment, social and economic considerations, rather than tied to a monetary figure. The 'community impact trigger' provided in the Commonwealth Airports Amendment Act 2010 requiring preparation of MDPs for on-airport developments and any streamlining of on-airport planning and development processes to benefit airports, should be strengthened to require a net increase in positive outcomes for local communities affected by airport developments and operations.

#### **Fit-for-Purpose Agencies and Regulations**

The Victorian Government notes that safety regulations and approval processes will need to evolve to accommodate emerging aviation technologies without derogating safety outcomes. The establishment of regulatory sandpits should be prioritised to support the development of novel aviation technologies in partnership with the safety regulator. The establishment of regulatory sandpits was a commitment in the CASA RPAS and AAM Regulatory Road Map and has been noted in various public engagements, however progress on this initiative is not apparent. Other countries, namely the US and the UK have well established regulatory sandpits and associated guidance, this impacts Australia's competitiveness, our likelihood of attracting investment and limits opportunities for industry development in Australia.

#### International Aviation (Bilateral Settings)

The Victorian Government supports the Commonwealth Government in negotiating bilateral air service agreements. The approach and strategy that the Commonwealth has engaged in bilaterally with other sovereign nations has always been based on negotiating capacity ahead of demand and concurrently seeking avenues to further liberalise the access, marketing and tariff arrangements embedded in any given treaty.

The establishment of a framework which promotes increased/and or unrestricted services to 'secondary' international airports, such as Avalon Airport should be considered. Avalon Airport is currently coupled with Melbourne Airport across several Air Service Agreements including the current agreement with Indonesia. The de-coupling of Victoria's primary and secondary international airports from such agreements could provide the impetus for an expansion of air services into non-primary gateways leading to benefits to both operators and passengers.

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# Chapter 3 – Airlines, airports and passengers – competition, consumer protection and disability access settings

### 3.1 - A competitive aviation sector

There are several issues associated with competition and consumer protection in the aviation sector. These include:

- Reliance on the Australian Consumer Law (ACL) v specific industry regulation (similar to EU261 in the European Union).
- Related to (a), the adequacy of carrier liability provisions as a consumer protection.
- Whether to allow cabotage.
- Whether to permit 'open skies' with any reciprocating country.
- Whether to introduce measures to reduce 'slot hoarding', such as charges on airlines that repeatedly operate services below a certain average load factor.

#### Cabotage, open skies and the national interest:

Cabotage refers to flights by foreign carriers operated solely within Australia. Such arrangements are often considered appropriate in markets that are not served by Australian airlines currently or where service is only undertaken due to subsidies. Broader cabotage may improve competition in the domestic market but may also have the longer-term effect of diminishing the presence of Australian carriers, and thus weaken Australia's strategic capacity to respond to emergencies requiring air transportation.

Similarly, entry of foreign carriers is dependent on international air services agreements. These agreements specify the capacity of services that foreign carriers may offer into the Australian market.

The deregulation of air routes has driven lower prices and greater choice for consumers. An example was the Australia-United States Open Skies agreement, which saw a duopoly of Qantas and United Airlines opened to competition. Several new carriers entered the market, including Virgin Australia, Delta, American and other carriers.

To this end, one issue to consider is whether Australia should sign up to the Multilateral Agreement on the Liberalization of International Air Transportation and other similar agreements to promote greater competition and choice for Australian consumers.

There is also a need to think about broader strategic considerations; including:

- Consideration given to a strategy which ensures that when permitting open skies and/or cabotage that this does not diminish local aviation capacity to such an extent that it prevents there from being an effective response to emergencies or other circumstances requiring aviation capacity.
- Consideration of impacts on the local workforce if a move towards greater competition involving foreign airlines in the domestic market.

#### Addressing airport slot hoarding:

As the paper notes, the Worldwide Airport Slot Guidelines entitles airlines to retain slots on the basis of historical precedence if they used the slots at least 80 per cent of the time in the previous equivalent season.

However, the 'use it or lose it' principle has some potential shortcomings:

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- It does not send a price signal to airlines for the cost of their retention of the slot. At a slot-constrained airport, such slots therefore become valuable property both creating windfall gains for the airlines that hold them, as well as imposing barriers to entry for new participants to the airline market at slot-controlled airports, weakening competition.
- The costs to maintain slots are low, encouraging both 'ghost flights' to maintain the slots flights that depart with no passengers or a small number of passengers and last-minute cancellations, inconveniencing consumers (at little cost to the airlines). This in turn creates unnecessary pressures on the environment, as each unnecessary flight creates carbon dioxide emissions and therefore contributes to greenhouse gas emissions.

An issue to consider is whether there should be measures to address airlines that fail to utilise slots effectively, such as whether to charge airlines for future slot use when they repeatedly fail to operate services above a certain average passenger load factor (the ratio of the number of passengers to the number of seats), except where the service was not operated for circumstances outside the airline's control.

#### Create a fair and competitive business environment for small business operators

While the paper supports a competitive environment, small businesses may face challenges from new entrants or aggressive pricing strategies from larger companies or operators. To compete, small businesses will need to leverage their agility, customer relationships, and niche offerings.

Small businesses struggle to scale and compete on procurement contracts. A procurement framework with opportunities to collaborate with larger businesses would maximise small business participation.

The aviation industry's recovery offers a chance for small businesses to capitalise on renewed travel demand. Businesses that can adapt to the post-pandemic travel landscape, which may include heightened safety protocols and a shift in consumer preferences, could see growth. For instance, small businesses that offer products or services tailored to health-conscious travellers or provide innovative solutions for contactless service could benefit from these changes.

#### **Airservices and Access**

The Victorian Government suggests the White Paper should consider the role Airservices Australia plays in facilitating access to key capital city airports through providing equivalent services across these strategic assets. The ability of secondary international airports to secure international air services, and/or provide airlines the opportunity to plan such airports as an alternate aerodrome can be hampered by uncertainty around availability of ARFF and ATC services. Flexibility around resourcing to meet demand should be considered to enable dispersion of air services.

### 3.2 - Consumer Protections

#### Should specific protections be available for aviation?

When it was passed in 2010, the ACL sought to replace a range of different federal and state laws dealing with consumer protection.

However, the remedies for breaches of the ACL's consumer guarantees in relation to the supply of services (primarily damages) are unlikely to be of much direct use for consumers whose travel plans have been disrupted at late notice, especially when in mid-journey when damages or travel insurance are likely to be of limited use.

The protections offered in the European Union's Air Passenger Rights Regulation (EU261/2004) are worth consideration in this context. This regulation sets out a range of protections for consumers whose flights are cancelled or delayed due to reasons within the airline's control, or where passengers are denied boarding.







The EU's laws cover international flights from EU member states, and flights to EU member states on airlines from the EU (except where benefits, compensation or assistance were offered in that other country). Airlines are also not liable in circumstances outside the airline's control, such as political instability, meteorological conditions incompatible with the operation of the flight concerned, security risks, unexpected flight safety shortcomings and strikes that affect the operation of the airline.

When developing consumer protections, consideration should be given to ensuring that airlines do not compromise safety.

The imposition of additional consumer protections similar in nature to those in EU261 may impose additional costs on consumers in the form of higher airfares. In Europe, for example, Ryanair has imposed charges on its airfares to cover the cost of compensation.

#### The Civil Aviation (Carrier Liability) Regime

While protections such as EU261 provide for overt consumer protection, several international treaties including the Warsaw and Montreal conventions require air carriers provide compensation for the death or bodily injury of passengers, and the loss of, damage to or delay of their baggage. The Montreal convention also requires airlines to be insured against such loss.

In Australia, these treaties have been adopted in the Civil Aviation (Carriers' Liability) Act 1959 of the Commonwealth, which also a similar regime for domestic carriage. In addition, each state has passed legislation to adopt most aspects of the Commonwealth's laws for intrastate air transport.

However, these arrangements do not cover the costs faced by consumers in the event of delay or cancellation caused by the carrier and are therefore incomplete as a means of protecting consumers, even in combination with the Australian Consumer Law which is difficult for consumers to enforce through complex and costly court action.

#### 3.3 - Disability Access

The Victorian Government supports the paper's focus on improving access for people with disability and taking additional measures to remove barriers as in line with Policy Priority 5 of Australia's Disability Strategy 2021 – 2031. The Disability Royal Commission's final report highlights the importance of consultation, collaboration and co-design with people with disability, which is an important consideration for identifying improvements to aviation accessibility that are outside the scope of the Disability Standards for Accessible Public Transport, and Disability Access Facilitation Plans.

The Victorian Government strongly supports an agreed way of managing responsibility for matters occurring at airports and in flight. The Green Paper articulates how the lack of operational responsibility across airlines, airports, and interface areas can lead to or exacerbate access and inclusion difficulties for people with disability. The lack of well-defined divisions of jurisdiction and responsibilities are a key contributor to discriminatory practices and negative and distressing experiences for people with disability.

The Victorian Government supports the development of training programs co-designed and delivered alongside people with disability for workforces employed at airports and airlines. Recruitment and retention of people with disability and inclusive workforces could also be considered further in the paper's development.



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## Chapter 4 – Regional and remote aviation services

### 4.1 - The role of airlines and airports in supporting regional economies

As noted in the Paper, revenue generated by air services to regional airports is often not significant. As the majority of regional airports are operated by local councils, generating sufficient revenue to maintain the airport to a standard required to support emergency response and freight is critical. Additional funds to update facilities to attract and grow RPT services is often sought through Council budgets against other competing priorities. In addition to consideration of extending the Regional Airport Program, consideration should be given to enhancing planning and approval pathways for development of commercial activities on airport land. The ability to attract tenants can have a broader impact for the local community through increased lease revenues, improved airport facilities, and the creation of jobs for regional residents.

Recent commercial developments at Avalon Airport and its plans for expansion offer an excellent example of what airports can offer as regional employment precincts.

A number of significant companies are establishing a presence at the Avalon Airport Industrial Park creating employment opportunities for the rapidly growing Greater Geelong and western region of Greater Metropolitan Melbourne.

The Victorian Planning Authority (VPA) is working with the City of Greater Geelong to prepare a Precinct Structure Plan (PSP) and Development Contributions Plan (DCP) for a state-significant employment precinct in Avalon with Avalon Airport as a key land use within the precinct. The Greater Avalon Employment Precinct is identified in the Avalon Corridor Strategy and will use its proximity to the airport to establish an aerotropolis that will feature significant industrial and commercial opportunities.

#### What opportunities do emerging aviation technologies present for regional and remote Australia?

The opportunity for emerging aviation technologies for regional and remote Australia is significant. The introduction of low and zero-emission aviation technologies is expected to unlock new regional routes previously unserved by traditional aviation, including viable opportunities for intra-regional connections which are currently non-existent in the Australian aviation market.

The economics for AAM flights in regional Australia are anticipated to improve as the sector scales over time, through higher utilisation, connectivity improvements and aircraft technology advancements, particularly as hydrogen propulsion systems scale. To drive early utilisation of these technologies in regional settings, the Australian Government should consider options to incentivise regional aviation services to become early adopters of emerging aviation technologies to stimulate market development, which could also boost economic growth in regional areas.

The emergence of AAM, drones and electric aviation also presents commercial opportunities for regional airports, in terms of new aviation services, manufacturing, and testing and trialling. There is potentially scope to explore the creation of new regional airport precincts to agglomerate complementary clean energy and aviation technology industry to realise the benefits of co-location for manufacturing hubs, industry growth, partnerships, and research and development. Many regional airports are under-utilised and have good infrastructure that can be utilised for commercial benefit and community utility from emerging aviation activities.

It will also be important for governments to develop approaches to encourage research and development, advanced manufacturing and trialling and testing activities in regional Australia. Regional airports have the unique opportunity to co-locate the ability to conduct flight testing alongside manufacturing, which can result in costs savings and scope for expedient development for industry. Stimulating industrial opportunities in the regions also has the potential to stimulate economic prosperity and support the creation of new clean energy industries in regional Australia. This is particularly relevant to regions that are currently undergoing industrial change as



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a result of the transition to the clean energy economy. Industrial opportunities from emerging aviation technologies will support the diversification of regional economies.

Emerging aviation technologies can also be used to support service delivery in regional areas. Many countries around the world are already using drone delivery for medical and other critical supplies in regional and remote areas. Larger AAM aircraft are also being developed to support aeromedical operations, which will assist to address the inequality of access to medical facilities in regional areas. The use of emerging aviation technologies is often cheaper, quicker, possess more operational flexibility and contribute to emissions reduction.

The agriculture, primary industries, natural resource management and resilience and preparedness activities also stand to benefit from the efficiencies and improved capability of emerging aviation technologies. It is vital that government policies and regulatory frameworks actively enables these use cases.

# What are specific issues experienced by the regional and remote aviation sector in the context of decarbonisation? What elements should the Transport and Infrastructure Net Zero Roadmap and Action Plan include to recognise the specific circumstances of the regional and remote aviation sector?

Access to workforce to support regional R&D/manufacturing of emerging aviation technology – the Australian Government should consider programs to stimulate and incentivise workforce development and capability in regional Australia across a range of disciplines, including digital hardware, AI, clean energy, electric engines, composites, and advanced manufacturing.

Flexible regulatory frameworks and programs are required that address commercial barriers to entry, enable commercialisation of operations in regional communities, stimulate market activity and provide investment certainty.

For example, the Australian Government may wish to consider programs to encourage the development of electric recharging and/or hydrogen refuelling network infrastructure at regional airports and encourage the uptake of electric/hydrogen aircraft operations. There could also be scope to explore novel opportunities to develop multimodal charging infrastructure (combined charging infrastructure for cars, trucks and aircraft) or novel multi-use charging infrastructure that could serve a dual purpose for aircraft charging and battery energy storage for the electricity grid. Such initiatives could reduce duplication of charging infrastructure, support greater utilisation, and therefore reduce costs.

Creation of regional net-zero aviation industrial hubs may also stimulate local renewables industry development, create new regional jobs, encourage innovation and improve energy security across regional communities, particularly in regions where an economic transition is underway from fossil fuel industries.



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## Chapter 5 – Maximising aviation's contribution to net zero

## 5.1 - Opportunities and challenges in decarbonising aviation

## What should be included in relation to aviation in the Australian Government's Transport and Infrastructure Net Zero Roadmap and Action Plan (including for sectors, such as GA and airports)?

Inclusions could involve early actions to support decarbonisation and the growth in electric aviation, which could be done by supporting GA, flight training and airports to adopt the current range of small electric aircraft in the market. Passenger carrying AAM aircraft are also scheduled to enter into commercial service around 2027, and efforts should be prioritised to increase adoption and ecosystem readiness to boost decarbonisation efforts and grow commercial market mass to reduce costs.

While options to decarbonise larger aircraft operations will require more development and complex solutions, there are many options currently in the market that can be implemented immediately to support decarbonisation of general aviation, flight training and airport operations – and options to commence the decarbonisation of regional aviation over the next three to five years.

### 5.2 - Sustainable aviation fuel

## What are the current and future challenges in developing an Australian SAF production industry, including challenges associated with growing, refining and consuming feedstocks?

Globally, a number of international jurisdictions have implemented policy mandates and incentives to drive the decarbonisation of aviation, which may have the potential to impact Australian aviation operators. Australia should consider the level of subsidies offered in other international jurisdictions so that Australia remains competitive when attracting new SAF investment.

In Australia, SAF production is still in its infancy. Visible leadership at the highest levels of Government is required to ensure that Australia has the capacity and capability to meet the needs of Australian and international airlines, and the broader aviation community, in emission reduction targets.

While the Victorian Government accepts the importance of building industry literacy and social licence and robust SAF certification arrangements, any development of the Australian SAF industry needs to carefully consider key strategic risks. The Victorian Government advocates that the Commonwealth's SAF industry development policy needs to consider taking a diversified portfolio approach.

By spreading SAF capability across Australia (compared with having just one or two locations) will help reduce strategic risks, by:

- Reducing major supply disruptions with multiple manufacturing sites airlines will have the ability to access SAF supplies at other airports thus ensuring Australia has a more resilient SAF supply chain.
- Encourage the use of a variety of feedstocks to supply the SAF market. Different regions of Australia will use different feedstocks and therefore the chances of all feedstocks being affected (i.e., in short supply) at the one time would be less likely.
- Consideration should also be given to Waste-to-Energy feedstocks to reduce reliance on feedstocks that could otherwise be used for food.

While there will be economic challenges with this approach, Australia's aviation industry could have the potential to increase its vulnerability to one-off types of events/shocks.



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To support the development of the industry, the Australian Government should consider developing frameworks that address future skillset and workforce requirements for the SAF industry. In particular, understanding gaps in existing and future skillsets will ensure future skillset training programs are targeted and proportionate to industry need.

As authority for the development of policies and regulations related to SAF rarely sit with one level of Government, or within one Government department, the Australian Government should play a leadership and coordination role with the states and territories to create a nationally consistent and coordinated operational ecosystem.

## 5.3 - Electric and hydrogen powered aviation

## How can policy and regulatory settings support research and development and subsequent investment in emerging low and zero emission technologies and related infrastructure?

The Australian Government should consider increasing focus on funding programs that increase commercial impact and promote market development in zero emission technologies (such as increased funding for the Emerging Aviation Technology Partnerships Program). Industry-university collaboration is a key mechanism for the translation and commercialisation of research. Commercialisation outcomes for emerging aviation technologies must be driven by a balance of economic and social incentives that provide appropriate signals to foster a culture of industry engagement and collaboration.

Funding programs should be focused, and clear objectives established to solve critical commercial challenges and facilitate priority use cases. Funding programs dedicated to research and development should also encourage industry co-investment to ensure outcomes are aligned with priority commercial outcomes.

In addition, a supportive regulatory framework that unlocks barriers facing research, development and testing of emerging aviation technologies is also crucial to unlocking market pathways and subsequent investment. For instance, existing regulatory processes to enable operational flight testing of novel products, services or concepts are viewed by industry as currently being too restrictive and time intensive. Implementing flexible regulatory mechanisms that enables safe, controlled and time-limited environments for novel R&D will stimulate market development, encourage domestic and international investment and highlight Australia as a leader in aviation R&D.

#### What information and guidance is needed to support regional aviation's net zero transition in the context of these emerging technologies?

The Australian Government should consider targeted programs and initiatives that aim to raise understanding and encourage investment in zero emission technologies adoption for regional connectivity. This could involve working with regional development groups, such as Regional Development Australia and working with regions to understand local strengths and provide bespoke advice to support local ambitions.

Guidance and information could also be developed to support market development, highlight potential commercial opportunities and feasibility studies for various emerging aviation technologies, which may assist regions to attract investment from the emerging aviation technology sector. There is also scope to partner with academic institutions with relevant expertise to support the development of information and studies.

Further coordination across all relevant funding programs (EATP, ARENA, NRF and others) would support better access and understanding by industry.



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#### Supporting the net-zero transition

A comprehensive national skills mapping exercise through consultation with industry is recommended to understand future skillset and workforce requirements for the transition to net-zero. In particular, understanding gaps in existing and future skillsets will ensure future skillset training programs are targeted and proportionate to industry need.

Universities and TAFE's are already working with industry sectors such as renewables, advanced manufacturing, and engineering that can be adapted to support the aviation sector transition to net-zero. Supporting industry transition and worker upskilling can enhance the ability of the industry to rapidly take a leadership role within the international aviation community.

Consideration should be given to industry specific certifications and micro-credentials, as well as encouraging academia and industry partnerships. Increased investments in outcomes-focussed research programs (such as Cooperative Research Centres) should be considered to provide a suitable platform to foster collaborative partnerships between industry, university and Government. With the increased international attention on emission reducing technologies the Australian aviation industry has the opportunity to become an international leader through the transition.

## Chapter 6 – Airport development planning processes and consultation mechanisms

#### 6.1 - Noise

The Victorian Government supports continued work to minimise noise impacts from airports on local communities, including through appropriate planning provisions and obligations on airports and legislative requirements to ensure good outcomes for local communities as a priority. Victoria also looks forward to advances in technology and aircraft operations for a cleaner and greener aviation industry in order to reduce aircraft noise and other impacts on communities.

Successive State Governments have long planned to ensure Victoria's major airports can operate 24/7 curfew free. Victoria's state planning policy supports both Melbourne and Avalon airports' ongoing curfew free status. While streamlining of development planning processes for airports would be positive, any changes shouldn't dilute, but should seek to improve, outcomes for communities close to airports. The obligation to as far as possible reduce operational impacts on surrounding communities remains in the first instance with the operators of federally leased airports, the airline industry and federal regulators.

Planning controls guide the way people make important life decisions about matters, like the location of their house or where to invest in property development. Consequently, these controls need to provide a high degree of certainty over time for affected communities. While it remains the best available metric for statutory planning purposes, the inherent changeability of the ANEF system can work against this. These matters will require further consideration in work on ongoing noise management, including at-source controls. The Victorian Government supports and looks forward to further advances in technology to minimise aircraft noise on communities.

The Victorian Government, through its response to the Melbourne Airport Environs Safeguarding Standing Advisory Committee recommendations remains committee to improved land-use planning outcomes and greater certainty for residents near airports and under flight paths.

#### **Aircraft Generate Noise**

Victoria notes that community engagement is an important element of managing aircraft noise issues and supports the inclusion of formalised community engagement processes for all airports.







Victoria supports the reference to preparation of best practice guidance by Commonwealth agencies on consultation and ongoing engagement with affected communities beyond formal Community Aviation Consultation Groups and in addition to any public consultation requirements of state and Commonwealth statutory approvals processes. Ongoing public education and engagement will ensure communities are well informed about airport planning matters prior to commencement of master plans, major development plans or off-airport development proposals.

#### Land-use planning is the most effective way to manage the impacts of aircraft noise

Victoria has long planned for the 24-hour curfew free status of its international airports. Land use planning measures include limiting further intensification of residential and other sensitive uses in areas impacted by moderate and high levels of aircraft noise and addressing other airport safeguarding risks. The Melbourne Airport Environs Overlay, first introduced in 2007, is one of a number of planning protections the Victorian Government has introduced to protect Melbourne Airport's current and future flight paths from further urban encroachment and to minimise the number of residents exposed to aircraft noise.

However, it should be noted that land use planning can only work to minimise increases in populations living in airport environs and cannot address airport impacts for existing affected communities (page 96 of the Paper). This point needs to be clarified in discussions on the role of land use planning for airport safeguarding in the Paper (also on page 98, Figure 11 and page 101). Victoria would support broadening the scope of the Department's proposed noise insulation and property acquisition policy (mentioned in the Paper) to apply to other airports apart from Western Sydney International Airport (WSI). This will encourage all airport-lessees to pro-actively administer noise mitigation and attenuation programs for their communities (refer page 101).

The Paper needs to better articulate the very real challenges experienced by state and local governments in balancing competing policy objectives while remaining committed to airport safeguarding considerations. States and councils are balancing the need to minimise red tape and administrative burden with delivering a range of policy imperatives such as airport safeguarding and the need to increase housing supply. Navigating this delicate balance, protecting airspace, and adequately responding to the needs of engaged airport communities relies on better access to information about airport safeguarding risks and impacts on people's property, as well as the active engagement of Commonwealth aviation regulators in this space.

The national housing reform agenda and related state commitments to planning reforms will generate an increased need to find appropriate locations for more housing and better solutions for these development pressures. This will require more sophisticated responses to airport safeguarding through the National Airports Safeguarding Framework (NASF) land use planning guidance to better inform precinct planning for urban renewal, national employment and innovation clusters, as well as greenfield scenarios.

#### Continued commitment to the National Airports Safeguarding Framework will safeguard airport operations

Planning controls to manage the environmental effects of aircraft noise exposure and to protect the continuing operation of Melbourne Airport were first introduced in Victoria in 1992, well before the Council of Australian Governments (COAG) approved the NASF in May 2012.

The state's Planning Policy Framework and metropolitan strategy, Plan Melbourne 2017-2050 recognised Melbourne Airport as Victoria's primary transport gateway for air passengers and air-freight exporters. These policies, along with Part 3C of the Planning and Environment Act 1987, the green wedge planning provisions and the Melbourne Airport Environs Overlay, protect the airport and its environs from incompatible land use and development, supporting the airport's expansion, while protecting urban amenity.

The then Minister for Planning appointed the Melbourne Airport Environs Safeguarding Standing Advisory Committee in March 2020, to consider the effectiveness of existing planning provisions and processes and consider how the National Airports Safeguarding Framework may be further implemented in the Victoria Planning Provisions and relevant planning schemes. In May 2022, updates to the Victoria Planning Provisions were approved to strengthen the Planning Policy Framework and further implement the National Airports Safeguarding Framework in Victoria's planning schemes.

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The 2022 Victorian Government response to the Committee's recommendations outlines further work to update planning controls and provide better access to information and guidance for affected communities. Work is progressing on more effective and efficient ways to incorporate airport safeguarding considerations in land use planning decisions for both civil and military airports environs.

Victoria has requested assistance and advice from Commonwealth aviation regulators to further progress these planning reforms. The reforms are working towards a targeted, risk and evidence-based approach to airport safeguarding to minimise red-tape for applicants and administrative burden for councils. Among other things, this relies on access to important spatial data which is often held by either airport operators or Commonwealth agencies. The continued engagement, advice and practical assistance with sharing of spatial data from these organisations will be crucial to effective land use planning for airport safeguarding in the 21st Century. Improved access to interactive spatial data for residents, councils and proponents will help better inform decision-making and general understanding of noise and other aviation impacts.

Capacity building for better implementation of NASF in planning decisions will require joint, collaborative efforts by Commonwealth, state and local entities.

Victoria's experience to date has been that further detailed analysis of NASF is required to ensure airport safeguarding does not build-in an expectation and assumption that state land use planning will regulate where Commonwealth regulation stops. Where there is a clear role for land use planning, relevant technical expertise and resourcing from Commonwealth organisations in providing the required support is crucial to effective airport safeguarding.

This is especially the case with control of land use and development affecting airspace and future developments in regulating the emerging AAM sector.

#### Large scale infrastructure like airports may be developed over years or decades

The paper needs to better recognise that the opportunities to plan for new airports in greenfield scenarios such as WSI, rarely arise. In Victoria, state planning policy seeks to protect the ongoing operation of Victorian airports and airfields, strengthen their economic and transport infrastructure role, and facilitate their siting and expansion. Land use planning controls reflect government policy for both new and existing airports and cannot precede it.

#### Depicting aircraft noise: use of the Australian Noise Exposure Forecast and other noise metrics

Victoria supports use of Ultimate Practical Capacity ANEF and number-above contours (for strategic planning purposes only) to provide the greatest certainty possible for affected residents and to enable state land use planning to adequately reflect and protect the long-term interests of airports.

The Green/ White paper process presents a timely opportunity to revisit how land use planning can better reflect aircraft noise and other safeguarding risks to provide the community with a more enduring sense of certainty about the impacts of airports and aircraft activity on their property. A more sustainable approach to planning for aircraft noise and other safeguarding risks would avoid the need for regular updates to planning controls to reflect updated airport master plans. The changeability of planning controls in airport environs undermines airport communities' confidence and understanding of the need for airport safeguarding and significantly impacts residents' ability to develop their land. Victoria would support efforts by the Australian Government to modernise aircraft noise measurement metrics for airspace and flight path changes to improve information about aircraft noise available to the community, mentioned on page 18 of the Paper.

States regulate land use planning and lack the expertise required to verify the technical accuracy of updated ANEF contours. The more recent requirement for Commonwealth-leased airport operators to seek jurisdictions' written confirmation of the sighting of updated draft contours should be removed as it is considered unnecessary given the master planning consultation requirement and is an opportunity for further streamlining of airspace regulation related processes.



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#### Flight path and airspace planning

There is a need for better understanding of and access to required Commonwealth approvals for developers, communities and planners to ensure this is addressed earlier in the regulatory process. A Federally- owned and maintained online portal for all required Commonwealth approvals and enquiries (including NASF-related) for development proposals would help to achieve this and could better link with available state platforms for airport safeguarding matters, providing more consistent information and access to the community.

#### Noise from new technology such as drones

In addition to Commonwealth regulation of drone safety and noise and as part of its 2022 AAM Industry Vision Statement, Victoria will provide guidance on land use planning considerations of drone proposals where required, as the emerging AAM industry develops.

#### 6.2 - Community consultation mechanisms

The Victorian Government notes that current consultation proposals for Master Plans and Major Development Plans do not provide for active feedback beyond the airport concerned. Comments are received and summarised by the airport operator and provided to the Commonwealth Minister prior to a decision being made. However, there is no obligation for the Minister or airport operator to provide an explanation of how the comments have been addressed in the decision.

The current system where the airport operator acts as an intermediary between the Minister and submitters does not inspire public confidence in the process. The community consultation process warrants direct channels of communication with Commonwealth authorities.

#### 6.3 - Land use planning on-site at airports

Major Development Plan and development consent approval processes should ensure that proposals include an assessment against each NASF guideline. Noting that some airports refer development consents to state planning as a courtesy, these referrals often do not include the necessary assessment of proposals against all NASF guidelines.

For this reason, consideration of NASF at master plan and MDP stages needs to be required to ensure future proposals are directly informed by NASF land use planning guidelines.

Victoria supports improved arrangements for planning and development on airports and developing cooperative arrangements with State and local governments. Requirements for Major Development Plan preparation need to consider consistency with prevailing planning schemes and significant impacts on a broad range of values including community, environment, social and economic considerations, rather than tied to a monetary figure. The 'community impact trigger' provided in the Commonwealth Airports Amendment Act 2010 requiring preparation of MDPs for on-airport developments and any streamlining of on-airport planning and development processes to benefit airports, should be strengthened to require a net increase in positive outcomes for local communities affected by airport developments and operations.

At present the only requirement on airport lessees to involve State and local governments in airport planning is that lessees must seek State and local government comments on draft master plans, on a five or eight yearly cycle. The Victorian Government considers that the issues raised to date through this process have not always been satisfactorily addressed.



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Victoria would welcome improved coordination across jurisdictions. In particular, the State considers that improved coordination with the Commonwealth will enable non-aeronautical uses and development at airports to be strategically planned to integrate with the airport's surrounding region, having regard to relevant State and local planning laws, policies and objectives. This includes consideration of economic and transport development objectives for the broader region.

To provide more consistency and certainty across jurisdictions, Victoria supports the development of land-use planning guidelines for all airports including non-Federal leased airports, led by the Commonwealth for both on and off-airport land. Despite NASF's intent to provide a more harmonised approach to safeguarding, several guidelines leave important decisions about technical operational impacts and methodologies to individual states and airport operators- for example public safety and windshear. This can be challenging without guaranteed technical referral input from Commonwealth agencies.

While the Victorian Government supports the prohibition of inappropriate non-aeronautical uses, it notes this will require clear definition of those uses which comprise appropriate uses and those which do not. The Victorian Government would welcome the opportunity to provide input to these definitions.

#### **Future South East Airport**

A future South-East Airport also remains under consideration by the Victorian Government to adequately service Melbourne's ever-expanding south-eastern suburbs and the state's east. An airport in the south east is recognised in *Plan Melbourne 2017-2050*, the current Victorian Government's metropolitan planning strategy which aims to manage growth in the city and its surrounding suburbs to the year 2050. The proposed airport and its environs are protected under State Planning Policy.

The Victorian Government is supportive of the Plan Melbourne 2017-2050 *Action 49: Plan for a possible airport in South-East Region* which is intended to preserve this future option by incorporating planning protection for flight paths and noise contours, and the alignment for a connection to the potential rail line at Clyde.

## Chapter 7 – General Aviation

#### 7.1 - A growing general aviation sector

Are there any changes to policy and regulatory settings that might facilitate the GA sector's evolving role in Australian aviation including through protections at GA airports and supporting the transition to a sustainable, net zero GA sector?

*Electric aircraft for flight training:* Electric aircraft suitable for flight training activities are already available in the market. Recognising the inherently high costs associated with fight training today resulting in pilot workforce shortages, electric aviation has the potential to significantly cut costs of training programs and support the GA industry to transition to net-zero in the immediate term. Changes to pilot training regulatory requirements may be needed to align electric aircraft operations with training curriculum requirements in the regulations.

*Clean energy airport infrastructure*: The Australian Government should consider initiatives that help the development of clean energy infrastructure at airports, such as electric charging or hydrogen refuelling stations at aerodromes to encourage GA sector's transition to net zero. This should also include opportunities to consider multi-modal or multi-use charging infrastructure.

*Investment in local industrial base*: Investment programs that support a local clean energy industrial base and strengthen end-to-end aerospace supply chains will encourage clean energy aircraft OEM development, manufacturing and assembly in Australia. Advancements in electric motors, composites manufacturing, hydrogen fuel cells and automation are critical to creating an 'enabling' environments to encourage market adoption.



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## Chapter 8 - Fit-for-purpose agencies and regulations

## 8.2 - Safety regulation

An issue to consider is how alignment between Australia and other international jurisdictions can be achieved without compromising relevant safety standards applicable within Australia. Work to adopt or develop regulations in collaboration with international partners may also align with the work of the Commonwealth Department of Finance to increasingly align Australia with international standards. There is currently a pilot underway to facilitate the adoption and uptake of international standards and regulations with respect to consumer electrical goods.

#### Do you have any suggestions to improve current reform processes?

Safety regulations and approval processes will need to evolve to accommodate emerging aviation technologies without derogating safety outcomes. Reform processes must also not lose sight of the immediate priorities and current pain points for industry while more involved regulatory development and change projects occur.

Given the feedback from industry regarding approval times for emerging aviation technology applications, consideration should be given to the development of improvements to the systems and processes to facilitate expedited consideration of applications. This could involve the use of integrated digital systems that can process complex applications and integrate with the digital systems used by industry operators. This should also involve integrated digital systems to process and consider approvals under the SORA framework.

It is also suggested to develop more bespoke guidance material to assist emerging aviation operations, including testing and trialling operations that are crucial to support the development and commercialisation of the sector. Guidance materials are also important documents that support investors to understand market prospects of the industry and are actively used when making investment decisions.

The establishment of regulatory sandpits should be prioritised to support the development of novel aviation technologies in partnership with the safety regulator. The establishment of a regulatory sandpits was a commitment in the CASA RPAS and AAM Regulatory Road Map and has been noted in various public engagements, however progress on this initiative is not apparent. Other countries, namely the US and the UK have well established regulatory sandpits and associated guidance, which impacts Australia's competitiveness, our likelihood of attracting investment and limits opportunities for industry development in Australia.

## 8.5 - 'All hazards' regulatory approach

#### Do you support the Australian Government introducing enhanced security obligations?

Use of background checks for airport employees might be informed by reform proposals being examined in the care sector for an enhanced, nationally consistent model for worker screening and monitoring, with the creation of a database that would allow for better information sharing across sectors and between jurisdictions. Since airport worker background checks will be informed by reported data from different jurisdictions, the work being undertaken to resolve foundational issues such as alignment of metadata requirements, data quality, risk management, and authorisation pathways may also be relevant for this paper.



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## 8.7 – Passenger facilitation

## How can Government optimise partnerships with industry to streamline the movement of passengers and modernise the border, while also enhancing security?

The White Paper should clarify whether the use of biometric data would align with the Australian Government's proposed Digital Identity System, noting that that Victoria has not yet committed to participating and has already undertaken work to develop digital identity verification and certification. The Digital and Data Ministers Meeting (DDMM) is leading work about the development of verifiable credentials (with Victoria playing a lead role). DDMM has previously expressed its support for the development of digitally verifiable credentials in line with recognised standards. This should be the benchmark for any national framework for verifiable credentials in Australia.

### 8.8 – Air cargo facilitation

## In the air cargo environment, how could industry and Government better work together to leverage advances in technology as well as industry investments in infrastructure and technology to streamline movement of cargo?

In relation to threats posed to the integrity of Australia's cargo supply chains by 'trusted insiders', refer to 8.5 and comments about worker screening above.

Australia's airfreight supply chain plays a critical role in the Australian economy. Victorian air freight exports are highly focused as Australia's largest producer of highvalue, time-sensitive, temperature-controlled goods. The export of these has been significantly impacted by disruptions to the air freight supply chain during the COVID period and is yet to recover.

The concentration of air freight into a single jurisdiction is detrimental to all other jurisdictions. The resulting reliance on road and rail freight, with resulting increased emissions, lack of resilience to the event of disruptions, and increased time to market for time-sensitive goods, negatively impacts importers and exports and broader industries and communities.

The 2023 Review of the National Freight and Supply Chain Strategy is currently underway. Alignment of policies and approaches that are contained within this new report should be harmonised with the Aviation White Paper.

Consideration by the Australian Government should be given to policies that support the diversification of the air freight market in Australia and encourage the movement of goods to and from the nearest airport. This may include supporting the development of a geographical dispersed freight hubs, supporting the upgrade of facilities at regional airports, and the capture and collation of additional national freight data to support infrastructure planning.

## Chapter 9 - Emerging aviation technologies

## 9.1 - Emerging technologies: a leadership role for Australia

#### How can we build on Australia's strengths to ensure that Australian industry in the sector is able to be competitive internationally?

Victoria has a strong pedigree and capability in design, manufacturing and operations of emerging aviation technologies.

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A mix of support for the development of sovereign capability and ensuring Australia has clear and effective pathways for market enablement of AAM, drones and emerging aviation is crucial to developing and commercialising emerging aviation technologies in Australia.

Such support will require a regulatory approach that also actively supports research and development and enables industry to commence commercial operations in a timely manner, allowing operators to respond to commercial demand. At present, industry advises that regulatory frameworks and processes are not conducive to responding to commercial demand; through a lack of maturity of regulatory processes and philosophy, a lack of guidance material and appropriate process to support novel operations, and impractical timeframes for securing regulatory approvals for operations.

The development of efficient regulatory pathways that enable safe and scaled emerging aviation technology operations will increase the opportunities for Australia to attract investment and grow jobs related to the emerging aviation technologies sector. Without such regulatory approaches, the market, along with investment and jobs will flow to the jurisdictions with the most workable regulatory approaches that provide a pathway to commercialisation and financial sustainability.

Support is also required to develop and retain local industrial capability in Australia, particularly in light of lucrative incentives and the lure of bigger markets in foreign jurisdictions.

At the foundation of industrial capability is the need for programs and initiatives to develop local innovations and intellectual property in emerging aviation technologies (including the ability for testing and trialling within the regulatory frameworks). There is also scope to consider the development of more holistic industrial support programs that encompass broader and related industrial disciplines to aerospace, such as renewables, AI, electrification, automation, advanced manufacturing and emerging aviation market development/economics.

In order to support Australian operators to compete internationally, it is vital to ensure Australia's certification and ecosystem is export ready through consistency with foreign jurisdictions. While Australia accepts certain foreign safety certifications, Australian safety certification is not widely accepted internationally, which puts Australian companies at a significant disadvantage when seeking to access and compete in foreign markets.

At a fundamental level, there is a need to ensure safety certification in Australia is accepted and/or transferable to operations overseas. Without the ability for recognition of Australia's safety certification by foreign jurisdictions, Australian developers of emerging aviation technologies may relocate to overseas jurisdictions with more favourable certification acceptance, limiting the ability for Australia to develop and retain sovereign capability.

### 9.2 - Enabling the manufacture and uptake of emerging technologies

#### How could the Australian Government create an environment that fosters private investment in emerging aviation technologies?

The most significant element to support private investment in emerging aviation technologies is ensuring the appropriate foundational structures, policies, regulations and programs are in place to support the industry to commercialise and scale. It is vital to have alignment between the policy objectives of enabling regulations and investment strategies.

It is important to focus on the immediate policies, frameworks and regulations to create an ecosystem that will support the emerging aviation technology sector to transition from the current research and development phase into the commercialisation phase that is fast approaching.

Many investors specifically tie investment to achieving certain R&D milestones, which is not possible without an enabling regulatory framework. The need for the sector to dedicate significant resources work with regulator to develop new regulations, along with associated delays with approvals creates significant financial pressure, which is compounded as the sector is not yet commercially sustainable.



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Investment will also not materialise unless investors can see that governments are focused on creating the enabling environment where their investments can generate revenue and returns. It is also important for governments to signal their intentions to create the necessary enabling environments and infrastructure to provide the market with the confidence to invest in the sector.

While the current suite of safety regulation can enable emerging aviation technologies, they are not sufficient to provide the level of enablement and scale required to sustain growth and encourage increased investment in the sector. Without such enabling regulatory frameworks, the sector runs the risk of moving to jurisdictions with better enabling environments and infrastructure or running out of funding due to the inability to generate revenue.

For example, the novel Specific Operations Risk Assessment (SORA) used for safety approvals supports the flexibility to permit a vast array different operations and has served the emerging aviation sector well to date. However, that same flexibility does not assist to focus operators on meeting safety expectations and therefore presents a risk for operators that their investment in developing a novel concept of operation will not meet the requirements of the safety regulator. Unfortunately, this flexibility serves as a deterrent to launching novel operations in Australia, with some operators relocating to foreign jurisdictions where regulators can provide more certainty around operational safety expectations. The development of more guidance material would assist to address this issue.

It is acknowledged the current suite of Standard Operational Scenarios are valuable, and CASA should be encouraged to continue to expand this suite to cover the use of emerging aviation technologies for emergency services and disaster response, along with testing and trialling of emerging aviation technologies in regional areas and at regional aerodromes. It is also suggested that CASA prepare more guidance materials to support the emerging aviation industry meet the expectations and comply with regulatory requirements, which would increase certainty for industry and investors.

The SORA regulatory pathway also involves the necessity to obtain "area approvals" for a defined operational location. However, this effectively hampers the ability for drone operations to expand and scale across the country to meet commercial demand. It is suggested that an appropriate process is developed under the SORA framework to enable national operations, including over the high seas. It is understood that the "Type Certification" process would allow national operations, however it is noted that the majority of commercial drone operators operate under the SORA framework.

It will also be important for governments to develop approaches to encourages the uptake and adoption of emerging aviation technologies, as investment into the sector will be conditional on its ability to generate revenue and provide commercial returns. Governments can use utilise procurements as a tool to drive investment and stimulate local industry demand, through considering emerging aviation technologies for use in regional service delivery, healthcare, natural resource management, emergency services and disaster response, infrastructure inspections, public safety, defence, utilities and the resource sector.

Initiatives could also be considered by governments to encourage the broad adoption of emerging aviation technologies, given the costs of fleet renewal or operational changes can serve as a disincentive for the changes required for the adoption of emerging aviation technologies. Many industries will not undertake the transition to use emerging aviation technologies without incentives, given the necessity to generate a return on investment on existing fleets and/or business models.

#### What skills are needed for the emerging aviation technology sector workforce?

A comprehensive national skills mapping exercise through consultation with industry is recommended to understand future skillset and workforce requirements for emerging aviation technologies. In particular, understanding gaps in existing and future skillsets will ensure future skillset training programs are targeted and proportionate to industry need.

Australia is home to world-class universities and research organisations that are supporting the aerospace industry, along with related industries in renewables, automation, AI and advanced manufacturing. An increased focused should be placed on creating academia and industry partnerships that support innovation and commercialisation of novel technologies.



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Increased investments in outcomes-focussed research programs (such as Cooperative Research Centres) should be considered to provide a suitable platform to foster collaborative partnerships between industry, university and Government. Many foreign governments are investing significant funding in these types of programs, which serves as a disincentive to investment and creating new jobs in Australia.

## How can the Australian Government best work with states and territories to foster a supportive environment for investment in manufacturing of these technologies?

The Australian Government should play a leadership and coordination role with the states and territories to create a nationally consistent and coordinated operational ecosystem to ensure that Australia can realise a national emerging aviation technologies market and create the critical mass of industrial capacity and capability, supply chain volume, and transport and logistics market mass to sustain a commercially viable Australian-based emerging aviation technologies sector.

The Australian Government should also explore opportunities to include the consideration of matters relating to ecosystem creation and enabling infrastructure for emerging aviation technologies in relevant existing Commonwealth, state and territory engagement, including across relevant transport, infrastructure, industry development and skills portfolios coordination groups. Given the breath of implications and interests spanning all levels of government, it is important to commence the consideration of issues related to the emerging aviation technologies sector, including the identification of opportunities where emerging aviation technologies can address critical public policy, transport and community challenges.

The Australian Government can also play a critical role in engaging regions and cities through the Regional Development Australia (RDA) network, which could support regional readiness to adopt emerging aviation technologies given it's expected that much of the benefits will be in regional areas through improved connectivity, service delivery and industrial opportunities.

The Australian Government could also consider supporting dedicated trade missions to relevant international trade shows to highlight Australia's emerging aviation technology capability and products on the global stage to boost Australian export opportunities.

## What regulatory roles in particular do stakeholders see as critical for the Australian Government to lead to enable the advantages of new technologies while managing the risks?

Drones used in emergency management and disaster response are anticipated to be among the first use cases in Australia, given their increased capability, lower risks for frontline workers, lower costs and reduced emissions compared to traditional aviation used for similar purposes.

However existing regulatory frameworks do not provide sufficient certainty to enable emergency response agencies to use emerging aviation technologies in rapid and critical deployment situations. The need to rely on an approval from CASA prior to each mission does not provide the certainty required by emergency services agencies.

The Australian Government could consider working with state and territory emergency services and disaster response agencies to develop fit for purpose frameworks to support the deployment of the new capability of emerging aviation technologies, including for resilience and preparedness activities in light of increasing adverse weather and disasters.

Currently, seeking the required safety regulatory approval to permit drone operations is time consuming in a situation where rapid deployment of drones is essential. Regulatory approvals for the use of drones in emergency services need to be in place well before any emergency, which the existing regulatory processes do not support given the need for an "area approval" under the SORA framework that can only be obtained upon identifying the area where the emergency has occurred.

Practical and proportionate regulatory pathways, based on risk profiles and that enable rapid deployment will improve safety outcomes, reduce emissions, encourage market development and deliver cost savings to governments.



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It is also suggested that the Australian Government work more closely with states and territories to ensure alignment with investment strategies and industry development programs that support emerging aviation technologies, including across manufacturing, sovereign capability, renewables, and aviation system enablement.

#### How will priorities of Government agencies need to evolve as the uptake of emerging aviation technologies continues?

The Commonwealth should start considering the impact and opportunities of emerging aviation technologies on land-transport infrastructure planning and national transport network implications, including ensuring existing transport infrastructure is compatible with emerging aviation technologies where appropriate.

It is envisaged that emerging aviation technologies, such as AAM, drones and electric aviation will create new opportunities for moving people and freight, which could provide a better cost-benefit in some situations than investing in land-transport infrastructure. There will also be a need to consider multi-modal interchange implications for current transport and logistics terminals, along with considering opportunities to encourage emerging aviation technologies to stimulate the creation of new intra-regional connections.

Such consideration will be particularly relevant in regional and remote areas that may not be commercially or environmentally viable for land transport modes and associated infrastructure. It is noted AAM and drones in particular are "infrastructure-light", meaning they do not require expensive ground infrastructure to enable operations. The development of electric and hydrogen regional aircraft will provide new service possibilities for smaller regional airports that are not economically viable for the current fleet of regional aircraft.

Emerging aviation technologies touch upon a wide range of interrelated and multijurisdictional responsibility. Therefore, greater coordination and alignment is required across all levels of government to ensure all policies, regulatory frameworks and investment strategies actively support aligned policy objectives to enable the economic, social and industrial benefits that the emerging aviation sector promises. A miss-match in alignment with government objectives will create roadblocks in certain areas that will stymie the growth of the sector, which will adversely impact investment and the creation of jobs in this emerging sector.

Regulators will also have to ensure suitable processes are in place that can support timely approvals at an increased scale. At present, many agencies rely on manual paper-based processes, which don't leverage digital benefits of how emerging aviation technologies are managed. Regulators will need to consider new digital systems that can allow integrated, automated and expedited approvals for trusted operators and flag high-risk applications for human intervention by exception. Such systems will allow regulators to accommodate the growth in approvals and provide timely decisions to enable operators to respond to commercial demand without derogating the high safety standards that are expected.

#### Do Government policies and regulations need to change to better support growth in emerging aviation technology manufacturing?

Many foreign jurisdictions are aggressively investing significant levels of funding to support industry development and ecosystem creation for emerging aviation technologies as part of the broader transition to the clean energy economy. Australia is falling behind in the levels of investment, which serves as a disincentive to private investment and industry development in Australia.

Australia is home to world-class aviation technology manufacturing companies who are supporting the nation's adoption of emerging and clean energy aviation technologies. Ensuring the fit-for-purpose funding programs for grants, equity investment, loans or taxation measures to incentivise the growth of a local manufacturing industry is critical to retaining sovereign capability, supporting new intellectual property development and ensuring Australia is creating industries of the future to diversify Australia's economy. Without meaningful investment, Australia runs the risk of losing strategic industrial capability and the associated economic benefits to foreign jurisdictions.

The Emerging Aviation Technologies Partnership (EATP) program is a great initiative to focus the sector to apply technology to address critical public policy issues. Noting the significant volume of projects that were not able to secure funding, it is suggested this program continue with increased funding. It also noted ARENA, the



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National Reconstruction Fund (NRF) and other agencies have funding that may be available to the sector, however, there appears to be little coordination. Having a single portal with information on all relevant Commonwealth funding programs available for various elements of the emerging aviation technology sector would be useful.

It is also important to have the right policy settings that prioritises actions and investment in industries in complementary sectors, such as clean energy, advanced manufacturing, AI and digital technologies – along with ensuring alignment with aviation policies and regulations. Stimulating complementary capabilities will strengthening local industrial capability and promote industry partnerships to strengthen and expand opportunities for the development of critical aviation technology in Australia. This can also stimulate new partnerships with foreign manufacturing providers, further strengthen local supply chain capacity and attracting foreign investment.

It will also be important for governments to implement appropriate frameworks and programs that support universities to commercialise critical research, unlock market potential and support commercialisation efforts. Fit-for-purpose pathways will also encourage the start-ups to commercialise breakthrough innovations that can stimulate future aerospace manufacturing opportunities.

# As competition for access to airspace is expected to increase, how can government ensure fair and equitable access while maintaining safety and efficiency of this public use asset? How could a safe, open, competitive and commercial Uncrewed Aircraft System Traffic Management (UTM) market operate?

A clear market framework that sets out policy objectives of Australia's uncrewed traffic management (UTM) ecosystem should be in place before the design and deployment of a technology platform takes place. This will ensure that the UTM's structural design and technology platform achieves the overarching policy intent of how the UTM market will operate, including ensuring the system achieves an appropriate balance of government oversight and management of critical system functionality, while providing opportunities for industry to deliver services where appropriate to support innovation and new value-added markets.

Government should also ensure that future market issues and competition implications are fully understood to ensure the creation of an open and resilient UTM market that is underpinned by appropriate transparency, regulatory frameworks and suitable technology. It is vital that the UTM systems is not predicated on a reliance of any single industry player remaining in the market to ensure continuity in the system given the rapid evolution of the market.

In the shorter term while UTM is developed, expedient and flexible airspace change processes could be implemented to enable more immediate testing and trialling and novel flight operations of emerging aviation technologies as the industry matures. It is crucial to provide certainty for current emerging aviation operations and investors required to support industry to commercialise while any new platforms and tools are being developed.

In particular, given the increasing dimensions, flight profiles and mission objectives during drone testing and trialling activities, it is critical that mechanism are in place to permit flexible use of airspace while maintaining acceptable levels of safety. For instance, having practical safety regulatory pathways and guidance materials for implementing temporary danger areas as a risk mitigation for short term testing and trialling activities near and within an aerodrome (where appropriate) would support industry development efforts, and particularly support investment and new jobs in regional areas.

## How do we achieve a balance between mitigating the negative impacts of drones and Advanced Air Mobility (AAM) while realising the potential benefits?

Unlocking policy, regulatory and operational barriers to drone and AAM use cases that have a high community benefit, such as medical delivery, regional service delivery, natural resource management, resilience and preparedness activities, public safety (such as surf lifesaving), firefighting and emergency management will support an increasing understanding and awareness of the benefits and opportunities for new aviation technologies. As an example, over the short term,



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implementing guidance material and fit-for-purpose regulatory frameworks to expedite the use by emergency services and disaster response agencies will support increased utilisation of emerging aviation technologies in high-benefit use cases and build stakeholder confidence.

The Australian Government could lead engagement with local government authorities and regional development bodies in a collaborative manner to explore and implement opportunities for emerging aviation technologies to address local policy challenges. Deliberate effort to establish and create meaningful market opportunities will be critical to support the early commercialisation of the sector in a manner that has community support and understanding.

#### What form should a legislated scheme to mitigate risks of third-party damage from drone accidents take?

It is understood that currently, operators make judgements and choose insurance products to best suit the circumstances and nature of their operations. Any move towards a legislated scheme should be predicated on a finding that the current approach is not suitable to achieving the policy objective of protecting against any third-party damage caused by drones.

It will be important to ensure any legislated scheme is necessary and proportionate, given commercial operators are best placed to make decisions regarding insurance as part of the rigorous risk mitigation and safety strategy. If any scheme was to be adopted, it must have regard for the diversity of operations and differing risk profiles, as a one-size-fits-all approach will not work for the sector given its diversity.

If a scheme was to be adopted, it will also need to ensure it was appropriate and proportionate to the level of actual risk and based on relevant data. It would also need to consider commercial implications of mandating certain insurance products on such a nascent sector, ensuring it didn't overburden the sector with unnecessary cost and impact the financial viability of the sector, which may also impact the ability to attract investment and grow jobs.

It will also be important to understand any impact a legislated scheme would have on the competitiveness of Australia compared to the rest of world, as it could serve as a disincentive to investment in Australia and drive industry players overseas if Australia was the only country to implement a mandatory scheme.

## What frameworks does the Australian Government need to ensure community acceptance as the sector continues to develop, and particularly if it reaches some of the more optimistic growth projections?

It is understood the Australian Government has frameworks related to managing noise from emerging aviation technology and aviation safety, which includes the ability to take into account matters relating to privacy, security and the environment. It will be vital to ensure Commonwealth frameworks align with state/territory and local frameworks and are interoperable with international frameworks where appropriate to not deter foreign investment and export opportunities for Australian industry.

It is important to ensure the existence of information that outlines the various roles and responsibilities of Commonwealth agencies, including material aimed at the supporting the community to understand policy and regulatory objectives, various assessment criteria and high-level policy outcomes.

In additional to the various frameworks, governments can play a role in highlighting meaningful use cases, value and contribution of emerging aviation technologies and working with industry and the community to develop appropriate opportunities for emerging aviation technology and the industry to demonstrate its benefits and value to the community.



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## Chapter 10 – Future industry workforce

### 10.1 - Current challenges and outlook

#### The Australian aviation sector is struggling to attract a range of personnel including pilots and aircraft engineers.

The Victorian Skills Authority Employment Forecast Dashboard<sup>1</sup> details the estimated growth in employment by occupation in Victoria for 2023 to 2026. Table 1 is an extract of the data for total new workers expected in the aviation sector in Victoria by 2026 for the occupations 2311<sup>2</sup> Air Transport Professionals<sup>3</sup> and 3231 Aircraft Maintenance Engineers. Of the new positions, 560 (91.7% of total) and 391 (90.7%), respectively, are in metropolitan Melbourne.

Occupation	Employment 2023 (people)	Employment Growth 2023-26 (people %)	Retirements 2023-26	Total new workers expected by 2026
2311 Air Transport Professionals	2,498	404 (5.1%)	207	611
3231 Aircraft maintenance Engineers	2,184	266 (3.9%)	165	431

#### Table 1 Extract Employment Forecast Dashboard

Occupation requirements in the sector are mostly due to employment growth over the last three years combined with projected replacements for estimated retirements in these occupations.

#### **Pilot Training**

The industry has highlighted a shortage of flight instructors impacting the capacity of the sector to train pilots. While this issue impacts the training system, it would appear to be driven by other industrial issues, e.g., low award wage for flight instructors.

Nevertheless, in Victoria there are two main training pathways to achieve a commercial pilot licence (CPL): vocational education and training (VET) and higher education (HE).

Part 142 of the Civil Aviation Safety Regulations (CASR) sets out the organisational and administrative framework for issuing Part 142 flight training operators. It specifies the requirements and standards for flight training operators who conduct:

- integrated flight training for private or commercial pilot licences
- ratings required for multi-crew flight operations.

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<sup>&</sup>lt;sup>1</sup> Victorian Skills Authority (2023) *Employment Skills Dashboard.* 

<sup>&</sup>lt;sup>2</sup> Australian and New Zealand Standard Classification of Occupations (ANZSCO) at Unit Group Level.

<sup>&</sup>lt;sup>3</sup> Air Transport Professionals includes pilots, flight instructors and air traffic controllers.



There are several Part 142 Civil Aviation Safety Authority (CASA) approved flight training organisations in Victoria. These organisations are registered training organisations (RTO) regulated by either the (national) Australian Skills Quality Authority (ASQA) or by the Victorian regulator, the Victorian Regulation and Qualifications Authority (VRQA).

For a Victorian public provider to deliver the Diploma of Aviation (CPL) qualification, it generally partners with a CASA approved flying school, which provides reassurance to government on financial stability and quality of training.

Students undertaking VET studies may be able to access funding for the Diploma of Aviation on the Victorian Funded Courses List, dependent on whether the training provider has a contract with the Victorian Government to deliver training with government subsidies. While this funding contributes towards tuition, it does not cover aircraft costs that can be several hundred dollars per flying hour, with a minimum of 250 hours required which is a cost that requires the student to cover. A student may be eligible to access a VET FEE- HELP student loan if the training provider is approved by CASA.

In Victoria, enrolments in the Diploma of Aviation (Commercial Pilot Licence – Aeroplane) have reduced substantially with a 485 decrease in enrolments from 765 to 280 students, 2018 to 2022 respectively<sup>4</sup>. Box Hill Institute is the only public vocational education provider with the Diploma of Aviation on its scope but has recently exited the market.

As touched on above, cost should be considered as a barrier to studying aviation in VET. Students may pursue studying aviation in HE where there is access to greater funding support through HECS-HELP than the funding support provided through the VET FEE-HELP scheme.

In Victoria, RMIT University and Swinburne University of Technology provide flight training in conjunction with undergraduate and postgraduate studies. The Tertiary Education Quality and Standards Agency (TEQSA) is the regulator for higher education delivery across Australia, with universities authorised to self-accredit the courses they provide.

For a student to obtain a CPL through the VET or HE pathways they need to complete the relevant course and pass CASA examinations. Individuals must first pass their qualification which forms some of the requirements for certification as a commercial pilot by CASA as directed by Civil Aviation Safety Regulation (CASR) Part 61 Flight crew licensing. Once individuals are issued with recognition of competence can then apply to sit CASA examinations.

Better alignment of processes between VET or HE pathways and CASA examinations is needed to provide greater opportunities for individuals to complete their qualification and obtain a CPL. This may also support consistency across the sector. Industry Skills Australia is the Federal Jobs and Skills Council and is planning to work with CASA to strengthen this alignment.

Note, that the above focuses on VET and HE as the main pathways to obtaining a CPL. It is worth noting that an individual can also train for their licence outside of VET and HE pathways.

#### **Aeroskills Training**

RTOs deliver training required for a person to work as an aircraft maintenance engineer, including licensing with CASA. The qualifications include the Certificate II in Aircraft Line Maintenance and the Certificate IV or Diploma of Aeroskills in the mechanical, avionics or structures streams.

In Victoria there were 140 enrolments in 2022, detailed in Table 2<sup>5</sup>. Enrolments will rise and fall each year based on the sector's willingness to take on apprentices.

<sup>&</sup>lt;sup>5</sup> Source: NCVER Data Builder (2023), Extract of enrolments in Certificate II in Aircraft Line Maintenance and Certificate IV/Diploma of Aeroskills qualifications in Victoria 2022.



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<sup>&</sup>lt;sup>4</sup> Source: NCVER Data Builder (2023), Extract of enrolments in Diploma of Aviation qualification in Victoria 2018-2022.



Qualification	Enrolments
Certificate II in Aircraft Line Maintenance	5
Certificate IV in Aeroskills	85
Diploma in Aeroskills	50

Table 2 Aeroskills Enrolments in Victoria for 2022

No public provider currently delivers the aeroskills qualification in Victoria, and there is only one private RTO receiving state funding as a Skills First contracted provider. The nature of the training requires a level of scale and specialisation to deliver quality training.

#### **VET Delivered to School Students**

Most individuals enter the aviation sector directly from secondary school. This can be through a flying school or an aircraft maintenance engineering apprenticeship.

To support career decisions and provide exposure to the aviation sector, a student can participate in aviation related courses as part of their senior years study. VET Delivery to School Students (VDSS) allows students to undertake a VET subject in years 10 to 12. This may include undertaking an apprenticeship while still at school.

Qualification	Enrolments
AVI30419 Certificate III in Aviation (Remote Pilot)	30
AVI50219 Diploma of Aviation (Commercial Pilot Licence-Aeroplane)	73
MEA40718 Certificate IV in Aeroskills (Mechanical)	1

Table 3 Student Enrolments in Aviation related VDSS in Victoria in 20226

A new program in Victoria has been developed by Aviation Australia for students to undertake an Aeroskills VDSS subject in 2024. Students will study the Certificate II in Aircraft Line Maintenance one day per week across the final two years of study. The training will be delivered from a training facility at Essendon Airport. There is an initial enrolment of 14 students, with an expectation that enrolment numbers will grow in future years.

• Global demand for these personnel further challenges Australia's ability to attract and retain these personnel.

<sup>&</sup>lt;sup>6</sup> Victorian Curriculum and Assessment Authority (2023), Senior Secondary Certificate Statistical Information 2022 - Section 4: Vocational Education and Training Delivered to Secondary Students <u>https://vcaa.vic.edu.au/administration/research-and-statistics/performance-senior-secondary/Pages/2022-stats-info.aspx</u>



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• New skills will be required to produce, operate and maintain new aviation technology and fuels.

Victoria notes that new skills may also include drone piloting and, subject to CASA rules, these may not require the requisite number of hours compared to a CPL.

#### **Alternative Workforce Skill Solutions**

The Workforce Training Innovation Fund (WTIF) is a targeted, Skills First funding stream. WTIF creates opportunities for the joint exploration of new ideas and solutions to enhance workplace productivity and employment growth in priority industries identified by the Victorian Government, in collaboration with industry partners and Skills First training providers.

In 2018, Aviation Aerospace Australia received a \$1.8 million WTIF grant to develop 20 aviation micro-credential skillsets and deliver a training course to a minimum of 20 students. The project concluded in 2020 with 19 pilot course trials held including 143 participants. The Regional and Specialist Training Fund (RSTF) is a targeted funding stream that supports training for specific skills in regional areas of Victoria and specialist areas of industry need, as well as for priority cohorts whose needs are not being met by the current training market.

In 2023, Aviation Australia received a \$141,464 RSTF grant to deliver training in Sale to 6 students who could earn and learn as apprentices with Jet Aviation (located at the RAAF Base in East Sale). This project is in progress and is expected to conclude in 2025. Graduates of the program will receive the Certificate II in Aircraft Line Maintenance.

Also, there needs to be a focus on the new roles and occupations that will be required in line with the Victorian Government's Clean Economy Workforce Development Strategy 2023 – 2033 (Strategy). The aviation sector will be greatly impacted by the transition to net zero economy, with the introduction of new materials, aircraft and fuel types to lower the emissions associated with air transport. This will drive future workforce needs across both vocational and higher education qualifications, requiring agility and responsiveness to emerging workforce requirements.

*Workforce Development:* The aviation sector's technological advancements will necessitate ongoing workforce training and development. Small businesses will need to balance the cost of upskilling employees with the benefits of enhanced capabilities and services.

#### 10.2 - Regulatory and cultural barriers

#### Diversity remains a problem in the aviation sector, impacting on its attractiveness to employees.

The Victorian grant programs, WTIF and RSTF are designed to support both innovation and development of specialist skills in priority sectors and regional areas. Guidelines include the requirement to target diverse cohorts such as:

- students from Aboriginal and Torres Strait Islander communities
- students experiencing barriers to employment (e.g., long-term unemployed)
- students from culturally and linguistically diverse groups
- students with disabilities
- · women seeking to participate in training in male-dominated industries.
- students from low socio-economic status (SES) backgrounds



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#### Requirements to obtain skills and training hours (which are often done in regional areas) create barriers to entry for new employees.

Feedback from the flight training sector is that they have trouble attracting sufficient flight instructors to train pilots.

## Chapter 11 – International aviation

### 11.1 – Bilateral settings

The Victorian Government supports the Commonwealth Government in negotiating bilateral air service agreements. The approach and strategy that the Commonwealth has engaged in bilaterally with other sovereign nations has always been based on negotiating capacity ahead of demand and concurrently seeking avenues to further liberalise the access, marketing and tariff arrangements embedded in any given treaty.

Negotiating capacity ahead of demand provides the aviation industry the ability to confidently prepare to deliver services in alignment with demand.

The establishment of a framework which promotes increased/and or unrestricted services to 'secondary' international airports, such as Avalon Airport should be considered. Avalon Airport is currently coupled with Melbourne Airport across a number of Air Service Agreements including the current agreement with Indonesia. The de-coupling of Victoria's primary and secondary international airports from such agreements could provide the impetus for an expansion of air services into non-primary gateways leading to benefits to both operators and passengers.

Expanding bilateral traffic rights, above current and planned commitments, with key markets will positively impact the economy by increasing international passenger and freight capacity.



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